	Page 1
1	STATE OF NEW MEXICO
2	COUNTY OF CHAVEZ
3	FIFTH JUDICIAL DISTRICT COURT
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6	Connied Lea Gibson Andrews,
	Individually and as Personal
7	Representative of Tommy
	Lindell Andrews, Deceased,
8	
	Plaintiff,
9	
	vs. No. D-504-CV-2006-01258
10	Volume I
	United States Steel
11	Corporation, et al.,
12	Defendants.
	/
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16	VIDEOTAPED DEPOSITION OF
17	MARK NICAS, Ph.D, MPH, CIH
18	BERKELEY, CALIFORNIA
19	May 9, 2008
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23	DEDODUED DV. DICIIADD M. DAVED COD NO. 2445
24	REPORTED BY: RICHARD M. RAKER, CSR NO. 3445 FILE NO.: 800086
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                    Plaintiff,
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                                     No. D-504-CV-2006-01258
         VS.
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                                         Volume I
     United States Steel
     Corporation, et al.,
11
                    Defendants.
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                Deposition of MARK NICAS, Ph.D, MPH, CIH,
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     taken on behalf of Defendants, at Doubletree Hotel,
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     200 Marina Boulevard, Berkeley, California,
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     commencing at 9:32 a.m., May 9, 2008, before Richard
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     M. Raker, CSR No. 3445.
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1	REPORTER'S CERTIFICATE
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3	I, RICHARD M. RAKER, CSR #3445, Certified
4	Shorthand Reporter, certify:
5	That the foregoing proceedings were taken
6	before me at the time and place therein set forth, at
7	which time the witness was put under oath by me;
8	That the testimony of the witness and all
9	objections made at the time of the examination were
10	recorded stenographically by me and were thereafter
11	transcribed;
12	That the foregoing is a true and correct
13	transcript of my shorthand notes so taken.
14	I further certify that I am not a relative
15	or employee of any attorney or of any of the parties,
16	nor financially interested in the action.
17	I declare under penalty of perjury under the
18	laws of the State of California that the foregoing is
19	true and correct.
20	Dated this 15th day of May, 2008.
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	RICHARD M. RAKER, C.S.R. No. 3445
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getting in through dermal absorption. So there is no statement saying, And therefore the employer shall limit the amount of skin contact with benzene to so many minutes per day to so much surface area.

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But, to me, the discussions showing that dermal absorption can lead to an equivalent inhalation exposure shows me that OSHA was cognizant of the fact that dermal absorption should be accounted for, although it never in the language of the standard actually has a dermal absorption limit to it.

- Q. And in that discussion in the '87 preamble, OSHA ultimately determined that the potential dermal exposures that it was discussing there were so small they'd be irrelevant?
 - A. I'm not sure that's true.
- Q. Well, they were discussing it. That was in the context of --
- A. Of .1 per -- I think they were 19 discussing it in the context of whether you needed a 20 warning for more than .1 percent benzene in your 21 22 product.
 - O. In looking at dermal exposures to products with less than .1 percent benzene, OSHA didn't determine that there was significant risk from

A. Certainly.

2 Q. How many times did you also tell the 3 employer, And, oh, by the way, in addition to these 4 inhalation exposures, I've also separately calculated 5 these dermal exposures your workers are getting? Did 6 you ever do that?

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- A. I don't recall doing that.
- Q. In Terry Andrews' affidavit, did he give you any information about whether or not the Liquid Wrench his father used was from an aerosol or a nonaerosol can? And you're welcome to look back at it. I'm not trying to -- it's probably folder number 6, would be my guess.
 - A. Not in the affidavit. He may have had a statement in the deposition. I just don't recall.
- Q. As you sit here right now, then, if what you said earlier -- I think I interpreted it as you're relying on the affidavit for your exposure assessments.
- A. For the -- certainly for the frequency of use and the amount of time and contact. Yeah.
- Q. Do you have an opinion as you sit here now as to the relative amount of Mr. Andrews' use of aerosol Liquid Wrench as opposed to nonaerosol? Do you have an opinion either way?

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those exposures, true?

- A. You know, I don't remember. I'm -- I don't remember exactly what they said. They may have said that. I don't know.
- O. Maybe in another case we'll have a chance to spend some more time on that.

During the time that you worked as an industrial hygienist throughout your career, how many times did you ever calculate a worker's dermal exposure in the course of giving an employer advice about limiting its worker's exposures?

- A. I don't think I ever calculated a dermal 12 exposure. It was more like, You need to prevent 13 dermal exposure. 14 15
 - Q. You did take air-sampling results or you oversaw air-sampling results during your time as a practicing industrial hygienist in the '70s?
 - A. Yeah. I took them.
 - O. You took them. Okay.

And would you ever report those to the employers?

- A. Certainly.
- Q. And would you do estimates of
- time-weighted average exposures to various chemicals 24 25

based upon those air-monitoring results?

A. No. I think we went over this previously.

Q. Okay. And if the facts were that aerosol Liquid Wrench contained no benzene, then would it be fair to say that your exposure estimate for Mr. Andrews is somewhere between zero, which would account for all aerosol, and a high of the number you reported in your report?

A. Well, I don't think it would go to zero, because other people have talked about using nonaerosol Liquid Wrench, so clearly that was around. But it would be -- depending upon the -- if there were no benzene in the aerosol Liquid Wrench and if you said that there was a certain portion of Mr. Andrews' Liquid Wrench use that was the aerosol, then there would be a proportionate effect on the cumulative prevention of exposure to Liquid Wrench.

Q. Okay. I think this is my last line of questions.

Do you recall these witnesses being asked repeatedly in their depositions did they ever recall seeing a skull and crossbones on the Liquid Wrench cans? Do you recall those questions?

A. I recall some questions of the skull and crossbones.